

UIA

BANK 0	
IO_L01N_0	A18 P2-11
IO_L01P_0	B18 P2-13
IO_L02N_0	C17 P2-05
IO_L02P_0/VREF_0	D17
IO_L03N_0	E15
IO_L03P_0	D16
IO_L04N_0	A17 P2-07
IO_L04P_0/VREF_0	B17 P2-09
IO_L05N_0	A16 P2-03
IO_L05P_0	C16
IO_L06N_0	C15
IO_L06P_0	D15
IO_L07N_0	A14
IO_L07P_0	C14
IO_L08N_0	A15 P2-01
IO_L08P_0	B15
IO_L09N_0	F13
IO_L09P_0	E13
IO_L10N_0/VREF_0	C13
IO_L10P_0	D14
IO_L11N_0	C12
IO_L11P_0	B13
IO_L12N_0	F12
IO_L12P_0	D12
IO_L13N_0	A12
IO_L13P_0	B12
IO_L14N_0	C11
IO_L14P_0	B11
IO_L15P_0/GCLK4	D11 P1-02
IO_L15N_0/GCLK5	E11 P1-04
IO_L17N_0/GCLK9	E10 P1-06
IO_L17P_0/GCLK8	D10 P1-08
IO_L16P_0/GCLK6	A10 P1-10
IO_L16N_0/GCLK7	C10 P1-12
IO_L18P_0/GCLK10	A9 P1-14
IO_L18N_0/GCLK11	A8 Osc
IO_L19N_0	C9
IO_L19P_0	B9 P1-16
IO_L20N_0	C8
IO_L20P_0	B8
IO_L21N_0	D8
IO_L21P_0	C7
IO_L22N_0/VREF_0	E9
IO_L22P_0	F8
IO_L23N_0	F8
IO_L23P_0	A7
IO_L24N_0	B7
IO_L24P_0	C6
IO_L25N_0	A6
IO_L25P_0	B5
IO_L26N_0	A5
IO_L26P_0	F7
IO_L27N_0	E7
IO_L27P_0	D6
IO_L28N_0	C5
IO_L28P_0	C4
IO_L29N_0	A4
IO_L29P_0	B3
IO_L30N_0	A3
IO_L30P_0	A3 LED2
IO_L31N_0	F6
IO_L31P_0	E6
IO_L32N_0/PUDC_B	B2 LED1
IO_L32P_0/VREF_0	A2 P1-18

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UIB

BANK 1	
IO_L01N_1/LDC2	V20 P2-77
IO_L01P_1/HDC	W20 P2-81
IO_L02N_1/LDC0	U18
IO_L02P_1/LDC1	V19 P2-79
IO_L03N_1/A1	R16
IO_L03P_1/A0	T17
IO_L05N_1	I20 P2-69
IO_L05P_1	F18 P2-71
IO_L06N_1	U20 P2-73
IO_L06P_1	U19 P2-75
IO_L07N_1	P17
IO_L07P_1	P16
IO_L08N_1	R17
IO_L08P_1	R18
IO_L09N_1	R20 P2-65
IO_L09P_1	R19 P2-67
IO_L10N_1/VREF_1	P20 P2-63
IO_L10P_1	P18
IO_L12N_1/A3	N17
IO_L12P_1/A2	N15
IO_L13N_1/A5	N19 P2-61
IO_L13P_1/A4	N18
IO_L14N_1/A7	M18
IO_L14P_1/A6	M17
IO_L16N_1/A9	L16
IO_L16P_1/A8	L15
IO_L21N_1/RHCLK7	K20 P2-45
IO_L20P_1/RHCLK4	K18 P2-49
IO_L21P_1/RDY1/RHCLK6	K20 P2-47
IO_L20N_1/RHCLK5	L17 P2-51
IO_L18N_1/RDY1/RHCLK3	L18 P2-53
IO_L18P_1/RHCLK2	L19 P2-55
IO_L17N_1/RHCLK1	M20 P2-57
IO_L17P_1/RHCLK0	M19 P2-59
IO_L22N_1/A11	L18
IO_L22P_1/A10	L19 P2-43
IO_L24N_1	K16
IO_L24P_1	J17
IO_L25N_1/A13	H18
IO_L25P_1/A12	H19 P2-39
IO_L26N_1/A15	G20 P2-37
IO_L26P_1/A14	H20 P2-41
IO_L28N_1	H17
IO_L28P_1	G18
IO_L29N_1/A17	F19 P2-31
IO_L29P_1/A16	F20 P2-33
IO_L30N_1/A19	F18 P2-35
IO_L30P_1/A18	G17
IO_L32N_1	E19 P2-27
IO_L32P_1	F20 P2-29
IO_L33N_1	F17
IO_L33P_1	E18
IO_L34N_1	D18 P2-23
IO_L34P_1	D20 P2-25
IO_L36N_1/A21	F16
IO_L36P_1/A20	G16
IO_L37N_1/A23	C19 P2-19
IO_L37P_1/A22	C20 P1-21
IO_L38N_1/A25	B19 P2-15
IO_L38P_1/A24	B20 P2-17

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Clock0

Clock1



Title Bank0&1		
Size A4	Number	Revision
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UIC

BANK 2	IO_L01N_2/M0	V4	X
	IO_L01P_2/M1	U4	X
	IO_L36P_3	R5	X
	IO_L02P_2/M2	W3	GND
	IO_L03N_2	W4	P1-94
	IO_L33P_3	I3	X
	IO_L04N_2	R7	X
	IO_L04P_2	I6	X
	IO_L05N_2	U5	X
	IO_L05P_2	V5	X
	IO_L06N_2	U6	X
	IO_L06P_2	I7	X
	IO_L07N_2/V52	U7	X
	IO_L07P_2/RDWR_B	I8	X
	IO_L34N_3	U3	P1-80
	IO_L36N_3	I4	X
	IO_L09N_2/V50	W6	X
	IO_L09P_2/V51	V6	X
	IO_L10N_2	Y7	X
	IO_L10P_2	Y6	X
	IO_L11N_2	U9	X
	IO_L11P_2	I9	X
	IO_L12N_2/D6	W8	X
	IO_L12P_2/D7	V7	X
	IO_L13N_2	U8	X
	IO_L13P_2	V8	X
	IO_L14N_2/D4	I10	X
	IO_L14P_2/D5	U10	X
	IO_L18N_2/GCLK3	V12	P2-83
	IO_L17P_2/GCLK0	Y11	P2-87
	IO_L17N_2/GCLK1	V11	P2-85
	IO_L18P_2/GCLK2	U11	P2-89
	IO_L16N_2/GCLK15	W10	P2-93
	IO_L16P_2/GCLK14	V10	P2-91
	IO_L15N_2/GCLK13	Y9	P2-95
	IO_L15P_2/GCLK12	W9	P2-97
	IO_L19N_2	R12	X
	IO_L19P_2	I12	X
	IO_L20N_2/MOSI/CS1_B	W12	X
	IO_L20P_2	Y12	X
	IO_L21N_2	W13	X
	IO_L21P_2	Y13	X
	IO_L22N_2/DOUT	V13	X
	IO_L22P_2/AWAKE	U13	X
	IO_L23N_2	R13	X
	IO_L23P_2	I13	X
	IO_L24N_2/D3	W14	X
	IO_L24P_2/INIT_B	Y14	X
	IO_L25N_2	I14	X
	IO_L25P_2	V14	X
	IO_L26N_2/D1	V15	X
	IO_L26P_2/D2	I15	X
	IO_L27N_2	U15	X
	IO_L27P_2	W16	X
	IO_L28N_2	I16	X
	IO_L28P_2	V16	X
	IO_L29N_2	U16	X
	IO_L29P_2	V16	X
	IO_L30N_2	Y18	X
	IO_L30P_2	Y17	X
	IO_L31N_2	U17	X
	IO_L31P_2	V17	X
	IO_L32N_2/CCLK	Y19	X
	IO_L32P_2/D0/DIN/MISO	W18	X

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UID

BANK 3	IO_L01N_3	D3	X
	IO_L01P_3	D4	X
	IO_L02N_3	C2	P1-22
	IO_L02P_3	B1	P1-20
	IO_L03N_3	D2	P1-26
	IO_L03P_3	C1	P1-24
	IO_L05N_3	E1	P1-32
	IO_L05P_3	D1	P1-28
	IO_L06N_3	G6	X
	IO_L06P_3	F4	X
	IO_L07N_3	I5	X
	IO_L07P_3	I6	X
	IO_L08N_3	I4	X
	IO_L08P_3	I6	X
	IO_L09N_3	G4	X
	IO_L09P_3	E3	X
	IO_L10N_3	F2	P1-34
	IO_L10P_3	E3	P1-30
	IO_L12N_3	I2	P1-42
	IO_L12P_3	G3	P1-38
	IO_L13N_3/VREF_3	G1	P1-40
	IO_L13P_3	F1	P1-36
	IO_L14N_3	I4	X
	IO_L14P_3	I2	P1-44
	IO_L16N_3	I3	X
	IO_L16P_3	I3	X
	IO_L17P_3/LHCLK0	I1	P1-46
	IO_L20P_3/LHCLK4	K4	P1-52
	IO_L17N_3/LHCLK1	K2	P1-48
	IO_L18P_3/LHCLK2	K3	P1-50
	IO_L20N_3/LHCLK5	L5	P1-60
	IO_L21P_3/TRDY2/LHCLK6	L1	P1-54
	IO_L18N_3/TRDY2/LHCLK3	L3	P1-56
	IO_L21N_3/LHCLK7	M1	P1-58
	IO_L22N_3	M2	X
	IO_L22P_3/VREF_3	M2	X
	IO_L24N_3	M5	X
	IO_L24P_3	M4	X
	IO_L29N_3	P3	X
	IO_L29P_3	N4	X
	IO_L26N_3	N3	X
	IO_L26P_3	R4	X
	IO_L33N_3	R3	X
	IO_L30N_3	N1	P1-62
	IO_L25P_3	N2	P1-64
	IO_L25N_3	P1	P1-66
	IO_L28P_3	R1	P1-70
	IO_L28N_3	R2	P1-72
	IO_L30P_3	I1	P1-74
	IO_L32P_3/VREF_3	I2	P1-76
	IO_L32N_3	I1	P1-78
	IO_L34P_3	V1	P1-82
	IO_L37P_3	V2	P1-84
	IO_L37N_3	W1	P1-86
	IO_L38P_3	W2	P1-88
	IO_L38N_3	V2	P1-90
	IO_L02N_2/CSO_B	Y3	P1-92
	IO_L03P_2	V4	P1-96
	IO_L08P_2	V5	P1-98
	IO_L08N_2	V5	P1-98

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UIE

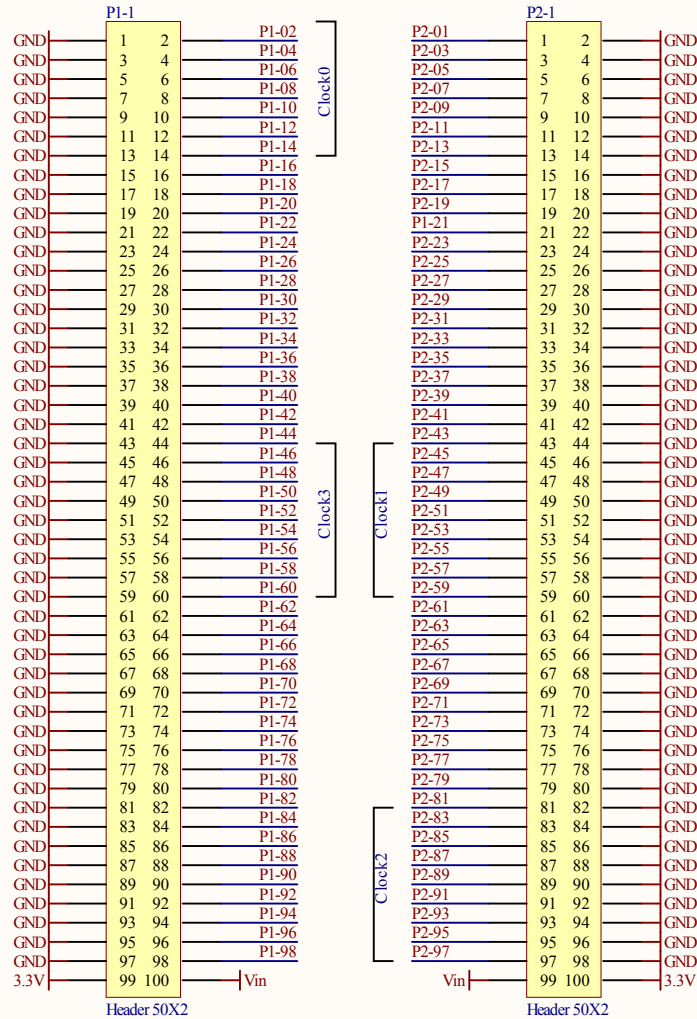
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	F11	IP_0
	F14	IP_0
	G8	IP_0
	G9	IP_0
	G10	IP_0
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	G13	IP_0
	H9	IP_0
	H10	IP_0
	H11	IP_0
	H12	IP_0
	G11	IP_0
		IP_0/VREF_0
	N14	IP_1/VREF_1
	P15	IP_L04N_1/VREF_1
	P14	IP_L04P_1
	M15	IP_L11N_1/VREF_1
	M16	IP_L11P_1
	M13	IP_L15N_1
	M14	IP_L15P_1/VREF_1
	L13	IP_L19N_1
	L14	IP_L19P_1
	K14	IP_L23N_1
	K15	IP_L23P_1/VREF_1
	J15	IP_L27N_1
	J16	IP_L27P_1
	J13	IP_L31N_1
	J14	IP_L31P_1/VREF_1
	H14	IP_L35N_1
	H15	IP_L35P_1
	G14	IP_L39N_1
	G15	IP_L39P_1/VREF_1
		IP_2
	P12	IP_2
	P13	IP_2
	R8	IP_2
	R10	IP_2
	T11	IP_2
	N9	IP_2/VREF_2
	N12	IP_2/VREF_2
	P8	IP_2/VREF_2
	P10	IP_2/VREF_2
	P11	IP_2/VREF_2
	R14	IP_2/VREF_2
		IP_3
	H7	IP_3
	G6	IP_L04N_3/VREF_3
	G7	IP_L04P_3
	J7	IP_L11N_3/VREF_3
	J8	IP_L11P_3
	K7	IP_L15N_3
	K8	IP_L15P_3
	K5	IP_L19N_3
	K6	IP_L19P_3
	L6	IP_L23N_3
	L7	IP_L23P_3
	M7	IP_L27N_3
	M8	IP_L27P_3
	N7	IP_L31N_3
	M6	IP_L31P_3
	N6	IP_L35N_3
	P5	IP_L35P_3
	P7	IP_L39N_3/VREF_3
	P6	IP_L39P_3

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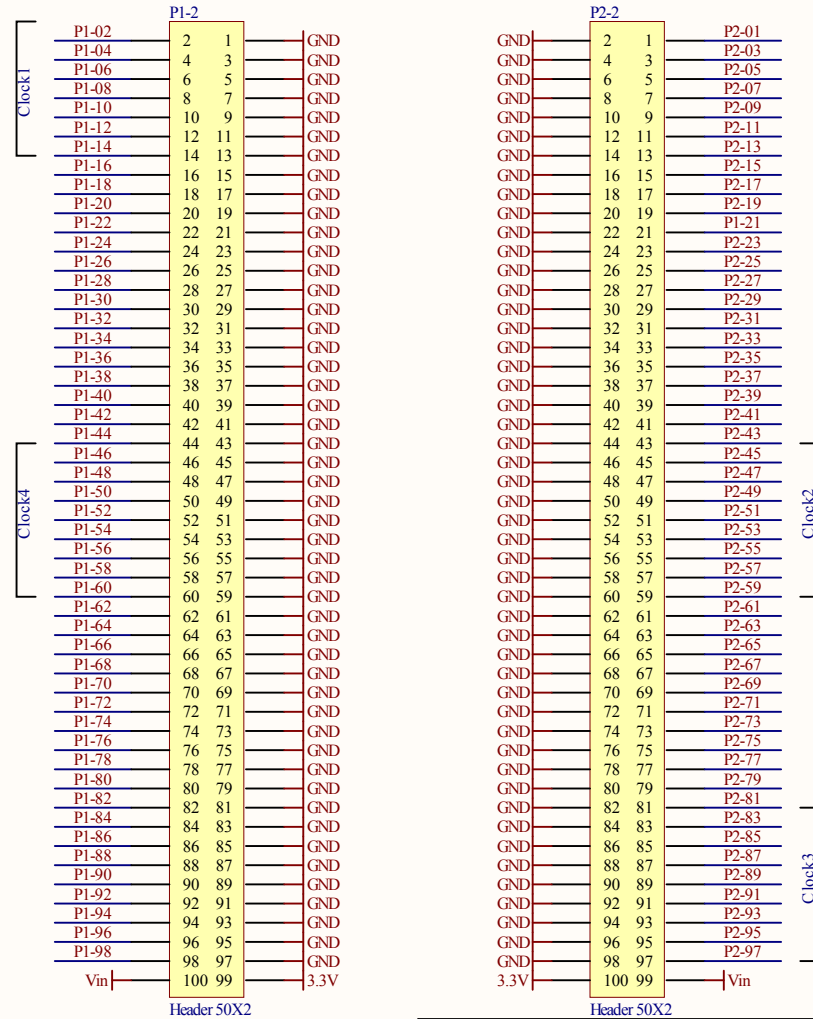


Title Bank2&3		
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Optional connectors, component side

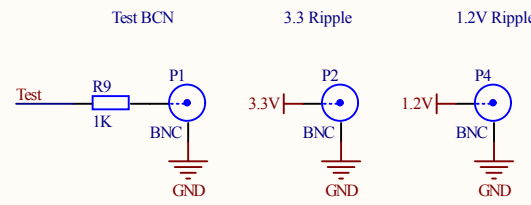
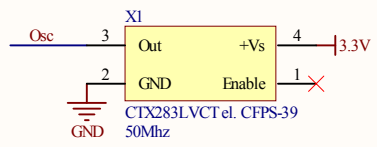
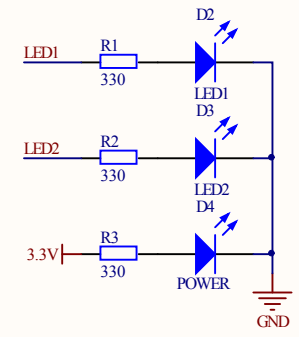
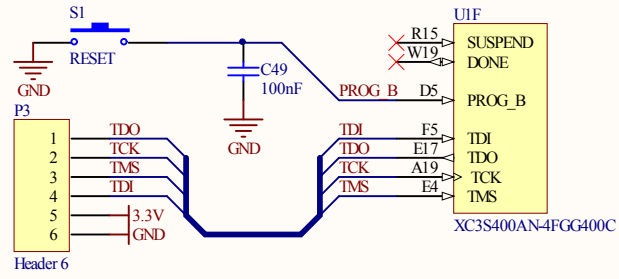
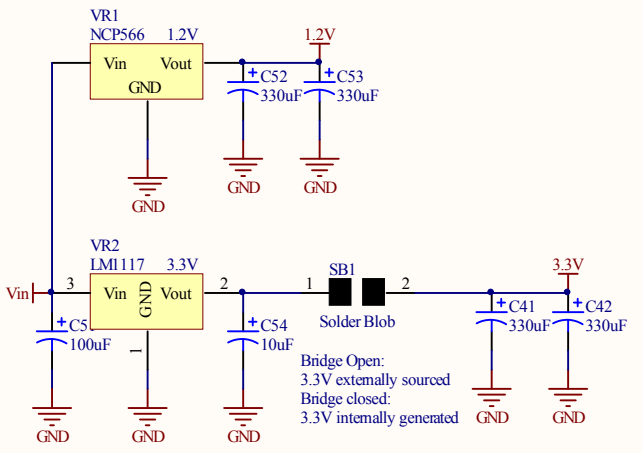
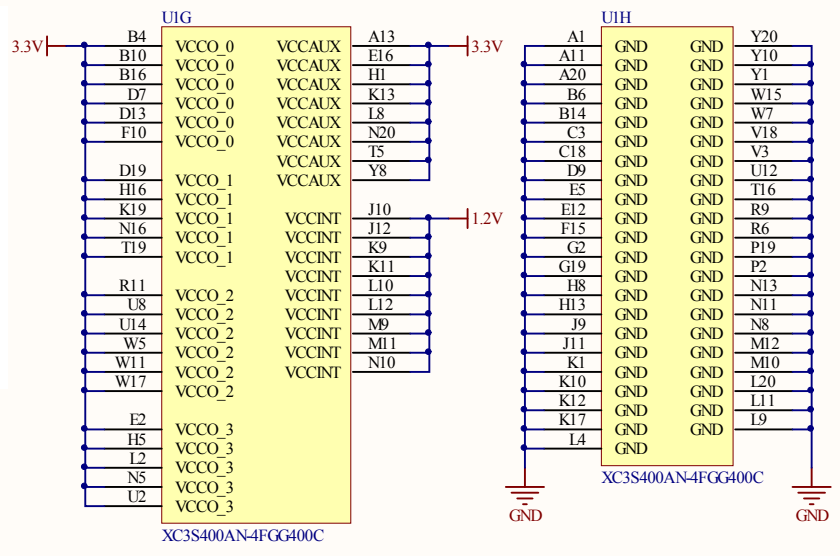
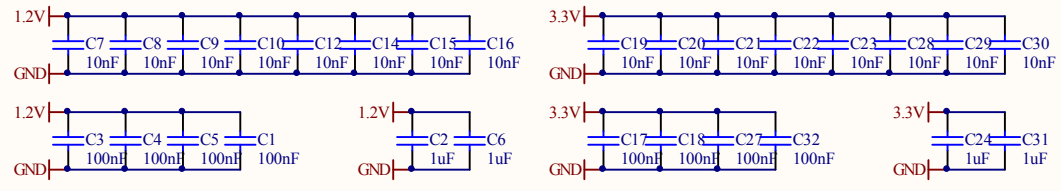
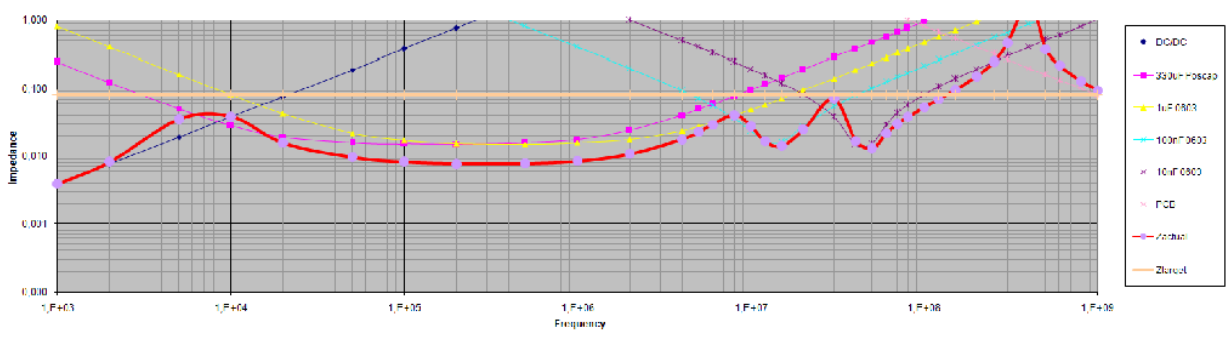


Optional connectors, Solder side

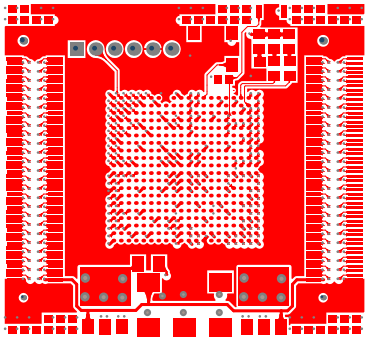


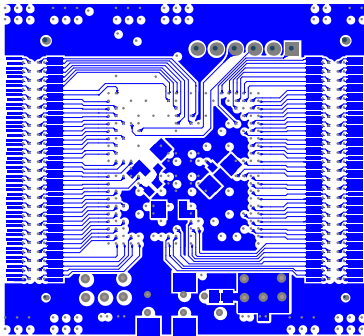
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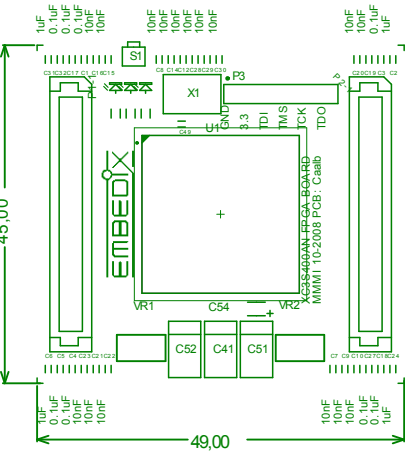
Decoupling Impedance vs Frequency



Title: Power		
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Date: 03-02-2009	Sheet of:	
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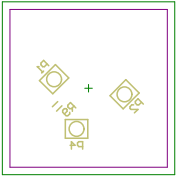




P1-S

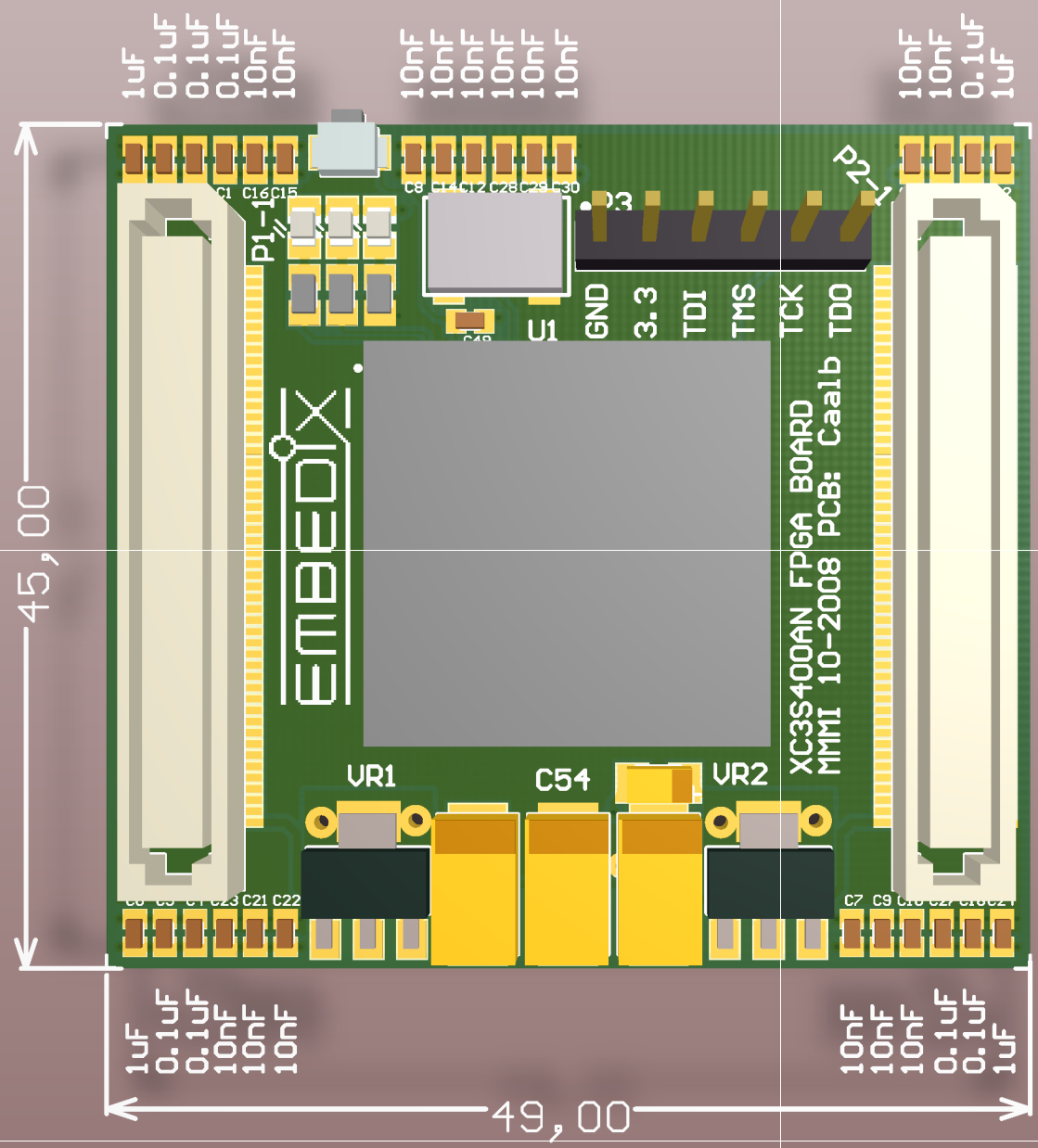


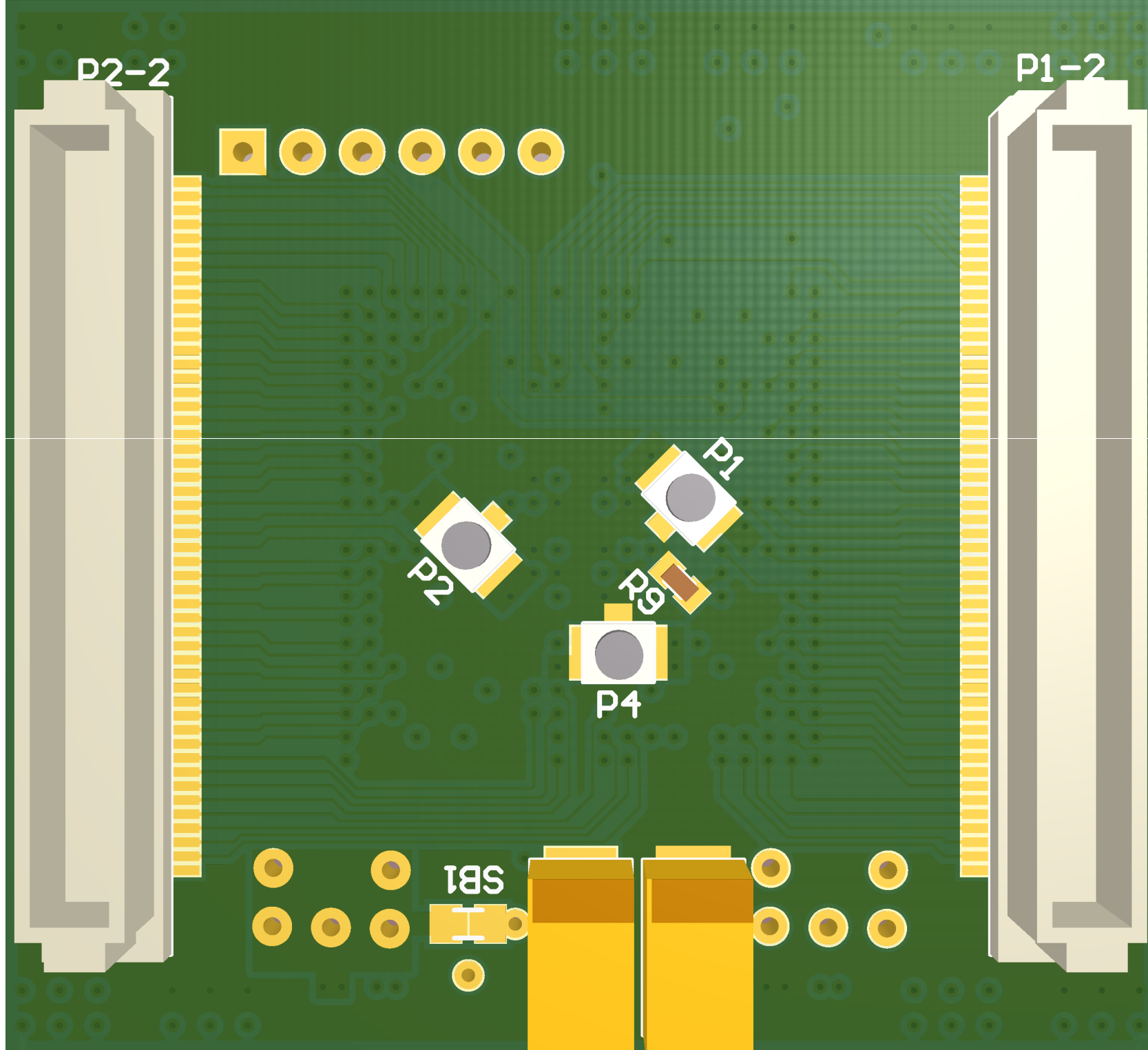
P2-S



C43	C45

1B2
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Value	Description	Designator	Footprint	LibRef	Quantity
		SB1	0805 v.solder_blob	Jumper	1
100nF	!Capacitor	C1, C3, C4, C5, C17, C18, C27, C32, C49	0603	Cap	9
10nF	!Capacitor	C7, C8, C9, C10, C12, C14, C15, C16, C19, C20, C21, C23, C28, C29, C30	0603	Cap	16
1uF	!Capacitor	C2, C6, C24, C31	0603	Cap	4
100uF	!Polarized Capacitor (Radial)	C51	Tantal size X	Cap Pol1	1
10uF	!Polarized Capacitor (Radial)	C54	1206Pol	Cap Pol1	1
330uF	!Polarized Capacitor (Radial)	C41, C42, C52, C53	Tantal size X	Cap Pol1	4
1K	!Resistor	R9	0603	Res2	1
330	!Resistor	R1, R2, R3	0805	Res2	3
50Mhz	3.3V, ultra miniature surface mount oscillator	X1	CB3LV-3C-50M000	CFPS-39	1
3.3V	800mA Low-Dropout Linear Regulator	VR2	SOT-223	LM1117	1
	FX8C-100P-SV6(91)	P1-2, P2-2	FX8C-100P-SV6(91)	Header 50X2	2
	FX8C-100S-SV(91)	P1-1, P2-1	FX8C-100S-SV(91)	Header 50X2	2
	Header, 6-Pin	P3	HDR1X6	Header 6	1
Green	LED	D4	LED0805	LED0	1
Red	LED	D2	LED0805	LED0	1
Yellow	LED	D3	LED0805	LED0	1
	Miniature Coaxial Connectors	P1, P2, P4	Miniature Coaxial Connectors	BNC	3
	Spartan-3AN Non-Volatile FPGA, 311 User I/Os, 400-Pin FBGA, Standard Performance, Commercial Grade, Pb-Free	U1	FGG400	XC3S400AN-4FGG400C	1
	Switch	S1	B3U-3000P	SW-PB	1
1.2V	Volt Reg NCP566	VR1	SOT-223	Volt Reg	1